2001
Fire In Washington
Annual Report

Washington State Patrol,
Office of the State Fire Marshal

Given the Choice

If I'd been given the choice,
you know I would've stayed.
grown a little more gray,
a lot more wise,
fought a few more fires,
saved a few more lives.

If I were given the choice,
I'd come back one more time to see and touch
the ones I miss; I'd dry one tear, steal one kiss.

And if I were to choose where you'd etch my name,
I'd ask to be with valiant souls who sought the raging fire to tame.

Carve my memory in the granite,
there with those who teach the world
what lion-hearted bravery is
each time another flag's unfurled.

- *Captain Aaron Espy*
Firehouse Poetry

In memory of:

Jeremy Chandler, 27
Tom Craven, 30
Karen Fitzpatrick, 18
Jessica Johnson, 19
Allen "Mac" Marriott, 46
Devin Weaver, 21

who lost their lives in the
line of duty in 2001.

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Washington State Association of Fire Chiefs
P O Box 7964 Olympia, WA 98507-7964 (360) 352-0161 Fax: (360) 586-5868 Email:wsafc@wsafc.org

September 16, 2002

To Fire Service Officials of Washington State:

On behalf of the ***Washington State Association of Fire Chiefs***, I would like to thank you for your continued support of our effort to collect timely, accurate statistical incident data within Washington State.

This data provides an essential reference point from which we can make informed decisions. Informed decisions lead to the best possible protection for our communities today and in the future. Your continued commitment and participation in this data collection and reporting process is vital.

The information contained in this report will enable us to:

- Support budget requests
- Identify essential fire code changes
- Structure effective enforcement programs
- Evaluate and plan safety education programs
- Plan for future fire protection needs.

The ***Washington State Association of Fire Chiefs***, in cooperation with the ***Office of the State Fire Marshal,*** has worked diligently to create this report and implement the National Fire Incident Reporting System within the state. This report reflects that effort but especially efforts by those who have contributed the data, which makes this program a success.

Thank you for your time and support. As we move forward with this project, we continue to strive for a process that is user friendly, accurate, and timely. As a result, it will better meet your needs as you serve your community.

Sincerely,

James Broman, President
Washington State Association of Fire Chiefs

g:wd.duane.data02

STATE OF WASHINGTON
WASHINGTON STATE PATROL
General Administration Building, PO Box 42600 • Olympia, Washington 98504-2600 • (360) 753-6540

September 6, 2002

Dear Partners in Fire Safety:

As demonstrated in the past year, the fire service has shown great courage and dedication to the citizens of Washington State. At no other time in history has it been more evident the sacrifice these men and women are willing to make in an effort to promote public safety. This report is dedicated to the 544 fire departments and districts, and 23,000 firefighters in Washington State who are committed to protecting life and property. It reflects the day-to-day emergencies these departments respond to, and captures the contributions these individuals make to each and every community in Washington.

In 2001, 208 of the 544 fire departments in the state reported emergency response data to the Office of the State Fire Marshal. This data reflects the 29,996 fires fire departments responded to, resulting in $129,810,964 in property loss. In addition, these reporting departments responded to 206,425 calls for emergency medical assistance.

The cost in terms of life and injury is equally significant, as Washington suffered the loss of 60 people due to fire. The majority of fires where deaths occurred were in the home. In 38% of the fatalities there were no working smoke alarms. Tragically six firefighters died in the line of duty, four of which died fighting the Thirty-Mile Fire in Okanogan County.

The Office of the State Fire Marshal will continue with its commitment to improve data collection so that it reflects the most accurate data possible, arming fire departments with statistical knowledge to learn from the past, focus on the present, and prepare for the future.

I commend the leadership of fire departments and districts of Washington State for their cooperative effort in providing the data compiled in this report, and look forward to achieving 100% participation in data reporting over the next several years.

Sincerely,

CHIEF RONAL W. SERPAS, Ph.D

Mary Corso

Mary Corso
STATE FIRE MARSHAL

Special Recognition

Participation in the NFIRS program is steadily increasing. Many fire service leaders in Washington State, such as fire chiefs and city or county commissioners and fire marshals, have demonstrated their support by soliciting participation of neighboring fire jurisdictions. In 2001, special recognition goes out to:

Mr. Derald Gaidos, Kittitas County Fire Marshal, for assisting fire agencies in Kittitas County with implementing the NFIRS program and achieving 100% participation throughout the county. Mr. Gaidos and his staff provided data entry service upon request to local jurisdictions as well as assisted with the installation of NFIRS software at individual fire agencies. Additionally, Mr. Gaidos is a key player in the Region 7 Life Safety Council serving Kittitas, Klickitat and Yakima counties. Currently the region is at 53% reporting.

Ms. Jackie MacLean, Yakima County Fire Marshal, for assisting fire agencies in Yakima County with implementing the NFIRS program. Ms. MacLean and her staff provided data entry service upon request to local jurisdictions. Currently Yakima County is at 60% reporting. Ms. MacLean is also an active member of the Region 7 Life Safety Council.

Chief Bruce Merighi, Chelan County Fire District #4, for encouraging participation in the NFIRS program throughout Region 6 which includes Chelan, Douglas and Okanogan counties. Through a grant awarded to Region 6, Chief Merighi provided data entry service. He also provided NFIRS training and assistance to many fire agencies. Region 6 is currently 59% reporting.

Ms. Pam Miller, Snohomish County Fire Marshal and staff for providing data entry services to departments within Snohomish County. Ms. Miller provided services upon request to local jurisdictions. Current participation is now at 43%.

Mr. Paul Wagner, Region 3 Life Safety Council, for increasing participation in the NFIRS program. Through a grant awarded to Region 3 which includes Island, Skagit, San Juan and Whatcom counties, Mr. Wagner was able to provide data entry services and other supportive functions to local fire agencies. Region 3 is currently 31% reporting.

Special Thanks

Seattle Fire Department provided the picture displayed on the cover and page 3 of this year's Fire in Washington annual report.

Washington State Association of Fire Chiefs for their ongoing support of NFIRS and demonstration of leadership toward statewide data collection.

Foreword

The Office of the State Fire Marshal (OSFM), in partnership with the Washington Association of Fire Chiefs, is diligently working with fire agencies to encourage 100% participation.

The 2001 Fire in Washington annual report has been compiled based on the available information provided by the Washington State Fire Service in the NFIRS 5.0 format. Summary information submitted by the four most populated cities (Seattle, Spokane, Tacoma, and Vancouver) has been included to illustrate the fire problems existing in our metropolitan areas. Summary information is displayed separate from the NFIRS 5.0 information because the data elements are not consistent.

In the years to come, the information included in the Fire in Washington will progress and become more comprehensive. Accuracy of the statistical reports is dependant on the quality of information entered into the NFIRS 5.0 system. The OSFM is dedicated to providing technical assistance to local fire agencies on all aspects of the NFIRS program.

State Summary
All Incident Activity

In 2001, 208 of Washington State's 544 fire agencies, or 38%, reported incident information to the Office of the State Fire Marshal, of those 193 agencies submitted data in the National Fire Incident Reporting System 5.0 (NFIRS) format.

The information presented in **Fire in Washington** is based on NFIRS 5.0 data. Where possible, summary data from the cities of Seattle, Spokane, Tacoma, and Vancouver will be displayed to provided a more comprehensive look into our State's fire problem. Since summary data is not compatible with NFIRS 5.0 data, separate categories have been established to best illustrate the information.

NFIRS 5.0 statistical information was generated using the United States Fire Administration Reporting Tool, which was designed to analyze only those incidents that pass national validation, in accordance with the national standard. There are 17,538 invalid incidents remaining for 2001, representing 11% of the total NFIRS 5.0 incidents reported. Invalid incidents were not used to compile statistical information for this annual report. The Office of the State Fire Marshal will continue to work closely with fire agencies to correct errors and decrease the percentage of invalid incidents.

In 2001, there were a total of 317,383 (NFIRS and summary) incidents reported with a total dollar loss of $130,569,786. Emergency Medical incidents represent the highest number of incidents this year, accounting for 65% of all responses. Fire incidents represent approximately 7% of all responses, with dollar losses representing 98% of the total loss reported for 2001.

Responses reported in the NFIRS 5.0 format

**Based on 193 of 544 agencies that reported NFIRS data*

Response Type	Frequency	% of Freq	Property Loss	Content Loss	Total	% of Total
Fire	9,713	7%	$37,720,690	$14,702,108	$52,422,798	98%
Overpressure, Ruptures, Explosion, Overheat	341	0%	$13,850	$1,750	$15,600	0%
Rescue & Emergency Medical Service	92,254	65%	$77,000	$1,050	$78,050	0%
Hazardous Conditions (No Fire)	4,642	3%	$320,800	$13,000	$333,800	1%
Service Calls	8,934	6%	$115,650	$141,260	$256,910	1%
Good Intent Calls	11,804	8%	$27,540	$765	$28,305	0%
False Alarm/False Call (including malicious)	3,449	2%	$1,000	$0	$1,000	0%
Fire Protection System Malfunction	4,282	3%	$3,550	$2,750	$6,300	0%
Unintentional Fire Protection System Activation	6,349	5%	$5,366	$19,000*	$24,366	0%
Severe Weather & Natural Disasters	166	0%	$3,000	$0	$3,000	0%
Other Type of Incidents	601	0%	$11,500	$0	$11,500	0%
Undetermined	41	0%	$0	$0	$0	0%
Total	**142,576**	**100%**	**$38,299,946**	**$14,881,683**	**$53,181,629**	**100%**

Summary Data for Seattle, Spokane, Tacoma, Vancouver

Note: Response type categories not consistent with NFIRS 5.0

Response Type	Frequency	% of Frequency	Dollar Loss
Rescue & EMS	114,171	72%	--
False Alarms & False Calls	11,177	7%	--
Good Intent Calls	6,992	4%	--
Service Calls	4,982	3%	--
Fire Responses	20,283	13%	$77,388,166
Hazardous Conditions	1,888	1%	--
Total	**159,493**	**100%**	**$77,388,166**

Grand Total ***NFIRS 5.0 and Summary Data***	***444,645***	***$130,569,795***

Fire Incident Responses

**Based on 193 of 544 agencies that reported NFIRS data*

The 9,713 fire incidents reported in 2001 resulted in $52.4 million in property and content loss to Washington communities. Though the number fire incidents only represent 7% of all the incidents reported, the dollar loss represents 98% of the total property and content loss. Structure fires represent 36% of the fire incidents, accounting for 88% of the total reported losses. Vehicle fires resulted in $3.4 million in losses.

Dollar loss reported with natural vegetation fires is primarily the cost associated with replacing trees, vegetation, and power lines in the fire area. These totals do not include any of the losses provided by the Department of Natural Resources (see page 33).

Agricultural properties lost valuable hay stacks, wheat, and other cultivated grain or crops to fire, resulting in dollar losses of $168,300.

Actual Fire Responses

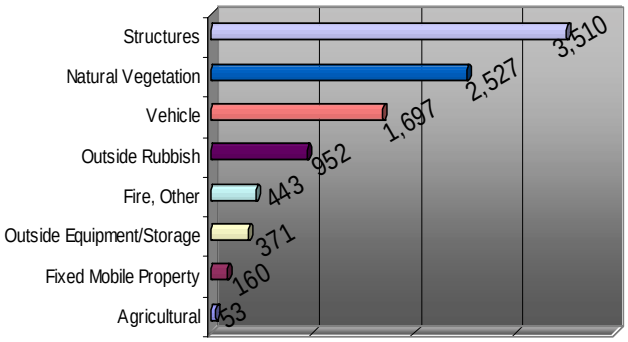
Fire Responses	Frequency	% of Frequency	Property Loss	Content Loss	Total	% of Total
Structures/Buildings/ Confined Fires	3,510	36%	$31,821,190	$14,125,377	$45,946,567	88%
Fixed Mobile Property	160	2%	$697,920	$279,570	$977,490	2%
Vehicle	1,697	18%	$3,347,052	$109,240	$3,456,292	7%
Natural Vegetation*	2,527	26%	$248,211	$5,702	$253,913	0%
Outside Rubbish	952	10%	$7,348	$1,103	$8,451	0%
Outside Equipment/Storage	371	4%	$1,122,805**	$41,950	$1,164,755	2%
Agricultural	53	1%	$227,960	$50	$228,010	0%
Fire, Other	443	5%	$248,204	$139,116	$387,320	1%
Total	**9,713**	**100%**	**$37,720,690**	**$14,702,108**	**$52,422,798**	**100%**

Percentages are rounded to the nearest whole number.

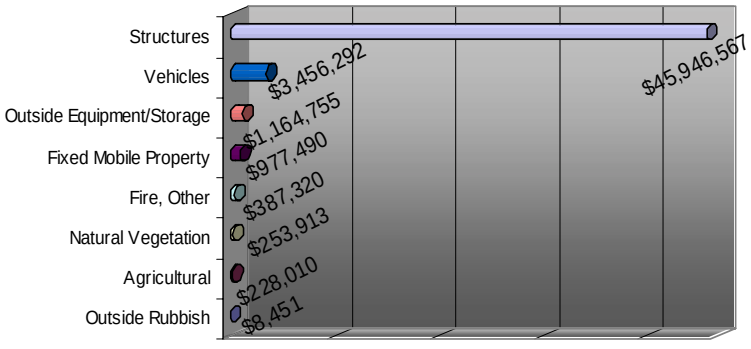
* Fire damage to a train trestle estimated replacement cost of $1 million.

** One incident resulted in $10,000 in property loss from a discarded cigarette igniting dry needles from an ornamental tree, which consequently scorched vinyl siding on the exterior of a business occupancy.

Fires by Category



Property and Content Dollar Loss



Ignition Source

**Based on 193 of 544 agencies that reported NFIRS data*

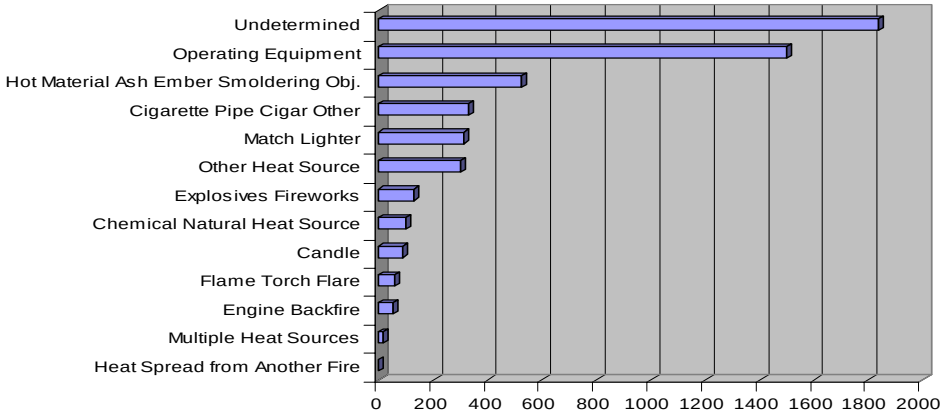
Ignition Source						
Ignition Source*	**Frequency**	**% of Freq**	**Property Loss**	**Content Loss**	**Total**	**% of Total**
Heat, Spark, Flame or Ember from Powered/ Operating Equipment	1,500	29%	$9,429,293	$3,506,327	$12,935,620	25%
Hot material, Ash/Ember, Smoldering Object	524	10%	$2,684,911	$759,103	$3,444,014	7%
Explosives, Fireworks	129	2%	$257,750	$91,320	$349,070	1%
Cigarette/Pipe/Cigar/Other	327	6%	$1,831,830	$545,850	$2,377,680	5%
Match/Lighter	311	6%	$495,760	$62,600	$558,360	1%
Candle	89	2%	$681,309	$213,586	$894,895	2%
Flame/Torch/Flare	56	1%	$149,751	$202,070	$351,821	0%
Engine Backfire	50	1%	$41,150	$2,200	$43,350	0%
Chemical, Natural Heat Source	96	2%	$139,985	$48,025	$188,010	0%
Heat Spread from Another Fire	0	0%	$349,795	$165,800	$515,595	1%
Multiple Heat Sources	16	0%	$363,501	$1,501	$365,002	0%
Other Heat Source	299	6%	$1,167,082	$432,641	$1,599,723	3%
Undetermined	1,838	35%	$19,831,872	$8,509,503	$28,341,375	55%
Total	**5,235**	**100%**	**$37,423,989**	**$14,540,526**	**$51,964,515**	**100%**

* *Property and content loss are based on estimates and not all agencies report these figures. Mutual aid and exposure reports are not counted in the incident total, but property and content loss are reflected. Percentages are rounded to the nearest whole number.*

Undetermined heat source represents 35% of all reported heat sources. In order to accurately analyze NFIRS data, the information recorded and submitted must reflect the best description of the incident.

Operating equipment is the leading known heat source reported, which includes arcing equipment equaling $4,990,388 and radiated or conducted heat from operating equipment totaling $3,479,181. One arcing incident, involving a transformer at a power plant, reported losses of $2 million.

Smoking materials are the second leading heat source reported; however, it is the leading cause for fire deaths in 2001.



Cause of Ignition

**Based on 193 of 544 agencies that reported NFIRS data*

Cause of Ignition is documented in the Fire Module of the NFIRS 5.0 reporting system. The Fire Module is required for incidents extending beyond a non-combustible container and incidents where injury, death or property and content loss result from a contained fire.

In 2001, Cause of Ignition was reported for 5,235 of the 9,713 fire incidents. The leading cause of ignition was due to unintentional fires. Preventative measures can be put into place to reduce the risk of fire occurrences.

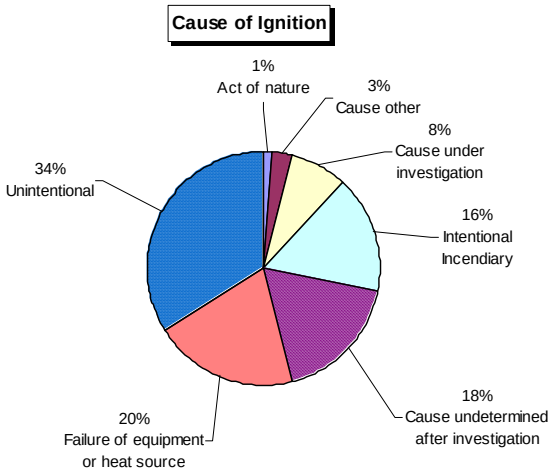
Safety tips:

- Maintain clearance between combustibles and heat-producing appliances.
- Follow maintenance schedules established by product manufacturers.
- Properly extinguish smoking materials in non-combustible containers.
- Soak hot ashes with water in a metal can and dispose of them away from structures and buildings.
- Do not leave candles unattended.

Cause of Ignition

Cause of Ignition	Frequency	% of Freq	Property Loss	Content Loss	Total	% of Total
Cause other	148	3%	$617,240	$242,000	$859,240	2%
Intentional	823	16%	$2,644,212	$556,516	$3,200,728	6%
Unintentional	1,767	34%	$9,297,421	$3,610,016	$12,907,437	25%
Failure of equipment or heat source	1,054	20%	$3,303,266	$1,248,985	$4,552,251	9%
Act of nature	56	1%	$32,000	$10,150	$42,150	0%
Cause under investigation	441	8%	$12,907,749	$4,820,308	$17,728,057	34%
Cause undetermined after investigation	946	18%	$8,622,101	$4,052,551	$12,674,652	24%
Total	**5,235**	**100%**	**$37,423,989**	**$14,540,526**	**$51,964,515**	**100%**

* *Property and content loss are based on estimates and not all agencies report these figures. Mutual aid and exposure reports are not counted in the incident total, but property and content loss are reflected. Percentages are rounded to the nearest whole number.*



Fires by Occupancy Use

Based on 193 of 544 agencies that reported NFIRS data

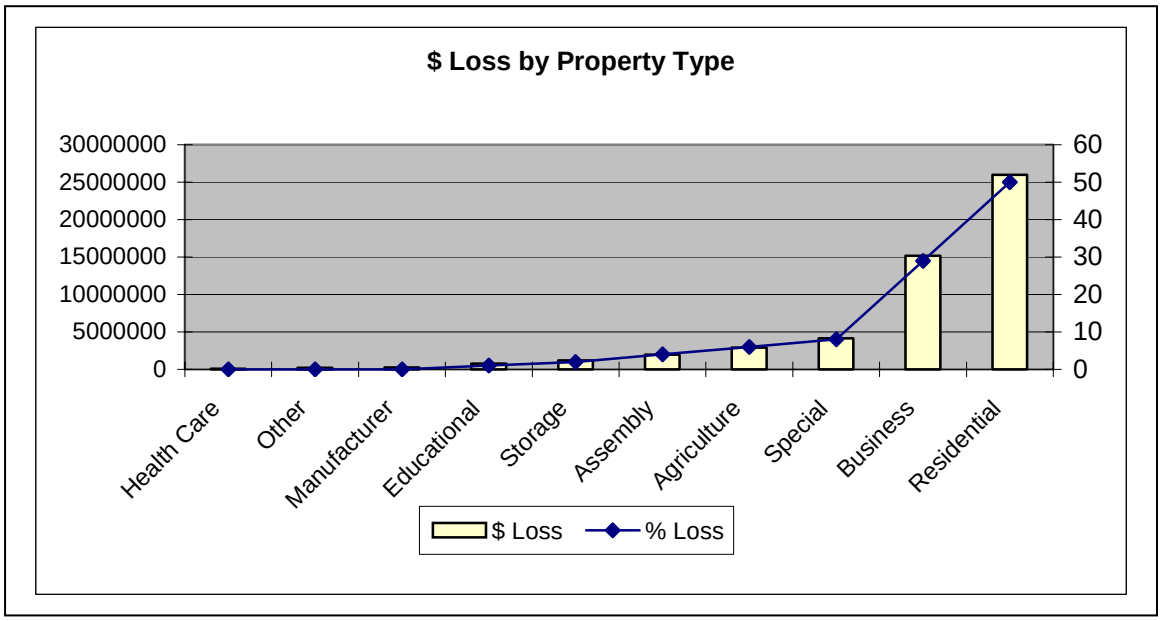
Outside or special property use represent 43% of fire occurrences. This broad category includes outside recreational areas, bridges, tunnels, trestles, railroads, streets, highways, parking areas, aircraft runways as well as pipeline or utility right of ways.

Residential properties account for 40% of all fires with a reported dollar loss of $25.9 million. Fire occurs more frequently in residential occupancies than in any other building use. Additionally, 81% of the fire fatalities in 2001 occurred in residential occupancies.

Public assembly and commercial businesses were reported to have more than $17 million in property loss.

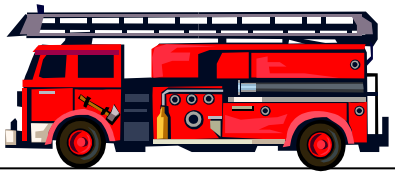
Fires by Property Type

Occupancy Use	Frequency	% of Freq	Property Loss	Content Loss	Total	% of Total
Places of Assembly	205	2%	$1,824,875	$156,855	$1,981,730	4%
Educational	173	2%	$394,421	$394,421	$788,842	1%
Health Care, Detention & Corrections	64	1%	$104,075	$1,130	$105,205	0%
Residential	3,881	40%	$18,971,745	$7,027,408	$25,999,153	50%
Mercantile, Business	308	3%	$8,866,002	$6,290,403	$15,156,405	29%
Agriculture, Mining	235	2%	$2,425,861	$488,001	$2,913,862	6%
Manufacturing, processing	76	1%	$204,601	$50,601	$255,202	0%
Storage	237	2%	$684,512	$510,253	$1,194,765	2%
Outside or Special Property	4,133	43%	$4,035,248	$123,151	$4,158,399	8%
Other Use, Undetermined or No property Use	401	4%	$209,350	$3,130	$212,480	0%
Total	**9,713**	**100%**	**$37,720,690**	**$15,045,353**	**$52,766,043**	**100%**



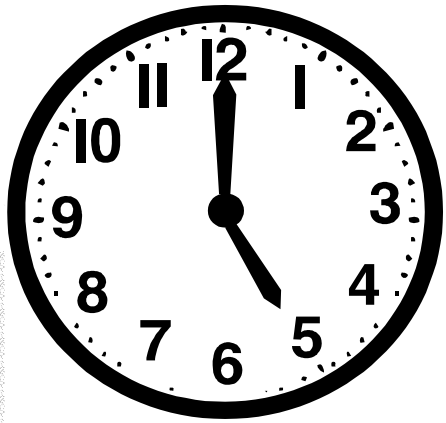
Washington State Fire Clock
Frequency of Responses as Reported in 2001

Based on 193 of 544 agencies that reported NFIRS data and summary data submitted by the cities of Seattle, Spokane, Tacoma, and Vancouver.



One fire incident is reported every 26 minutes.

Emergency Medical Service & Rescue reported every 2.5 minutes.



One structure fire is reported every 2.5 hours.
Based on NFIRS Data only

Dollar loss as a result of fire is:
$355,646 a day
$14,818 an hour
$247 a minute

Arson/Intentional Fires are reported every 10.8 hours.
Based on NFIRS data only

Figures are calculated based on the number of incidents reported by fire agencies to the Office of the State Fire Marshal.

Residential Properties

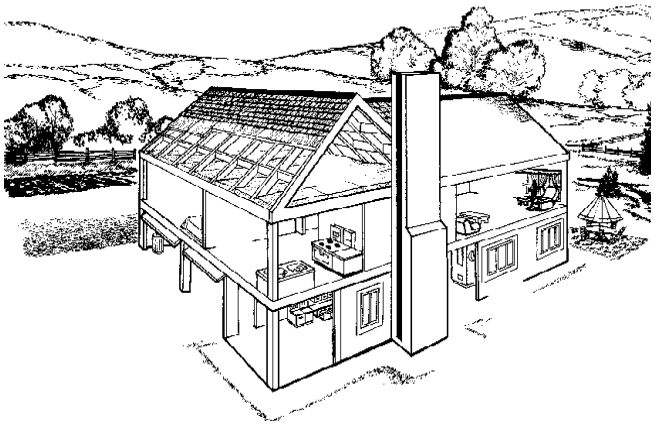
Based on 193 of 544 agencies that reported NFIRS data.

Including 1 or 2 family dwellings, multifamily dwellings, hotels/motels, sorority/fraternity houses, barracks, and dormitories.

Area of Fire Origin

Areas of Origin*	Frequency	% of Freq	Property Loss	Content Loss	Total	% of Total
Exiting System	60	3%	$613,667	$236,850	$850,517	3%
Assembly, Sales Area	123	6%	$2,255,537	$851,750	$3,107,287	12%
Living Areas	611	32%	$7,344,761	$3,454,210	$10,798,971	42%
Storage Areas	99	5%	$989,642	$528,050	$1,517,692	6%
Service Areas	62	3%	$17,900	$0	$17,900	0%
Service, Equipment Areas	38	2%	$227,425	$93,500	$320,925	1%
Structural Areas	282	15%	$4,141,996	$948,210	$5,090,206	20%
Transportation, Vehicle Areas	117	6%	$370,450	$29,701	$400,151	2%
Other Area of Origin	404	21%	$1,214,050	$190,780	$1,404,830	6%
Undetermined	140	7%	$1,589,870	$549,200	$2,139,070	8%
Total	**1,936**	**100%**	**$18,765,298**	**$6,882,251**	**$25,647,549**	**100%**

- *Property and content loss are based on estimates and not all agencies report these figures. Mutual aid and exposure reports are not counted in the incident total, but property and content loss are reflected. Percentages are rounded to the nearest whole number.*



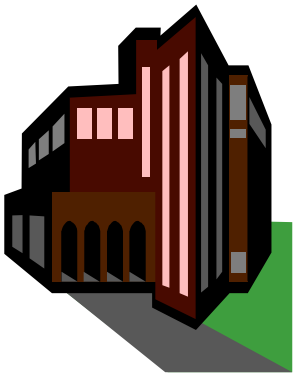
Cooking fires caused nearly $4 million in loss

A closer look at Living Areas

Cooking area, kitchen 38%
Bedroom 29%
Function area, other.....10%
Laundry area, wash house (laundry) 13%
Bathroom, checkroom, lavatory, locker room 9%
Office..... 1%

Educational Occupancies

Based on 193 of 544 agencies that reported NFIRS data
Includes childcare, preschools, schools, colleges.



Area of Fire Origin

Areas of Origin*	Frequency	% of Freq	Property Loss	Content Loss	Total	% of Total
Egress	3	3%	$0	$200	$200	0%
Assembly/Sales	4	4%	$0	$0	$0	0%
Functional	12	13%	$30,400	$10,225	$40,625	9%
Technical Processing	1	1%	$0	$0	$0	0%
Storage	14	15%	$1,350	$200	$1,550	0%
Service/Equipment	3	3%	$250,000	$5,100	$255,100	58%
Structural	6	7%	$100,050	$35,000	$135,050	31%
Transportation/Vehicle	13	14%	$8,700	$350	$9,050	2%
Outside	35	38%	$500	$0	$500	0%
Undetermined	2	2%	$0	$0	$0	0%
Total	**93**	**100%**	**$391,000**	**$51,075**	**$442,075**	**100%**

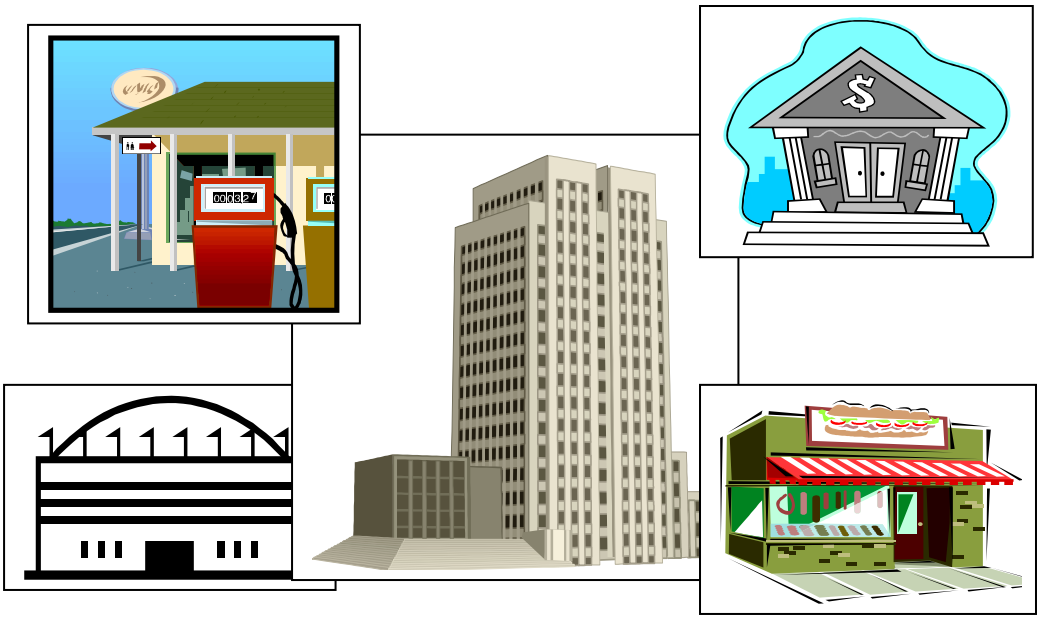
* *Property and content loss are based on estimates and not all agencies report these figures. Mutual aid and exposure reports are not counted in the incident total, but property and content loss are reflected. Percentages are rounded to the nearest whole number.*

The average fire incident resulted in property and content losses of $4,753. Outside areas were the leading area of origin and service/equipment areas were reported with the highest dollar losses.

Business Properties

Based on 193 of 544 agencies that reported NFIRS data.

Includes places of assembly, food and beverage establishments, retail stores, service stations, banks, and business offices.



Area of Fire Origin

Areas of Origin*	Frequency	% of Freq	Property Loss	Content Loss	Total	% of Total
Exiting System	7	2%	$252,000	$0	$252,000	2%
Assembly/Sales	20	7%	$334,000	$56,000	$390,000	2%
Functional	35	11%	$2,647,100	$3,028,000	$5,675,100	33%
Technical Processing	2	0%	$75,000	$75,200	$150,200	1%
Storage	29	10%	$1,536,301	$1,005,001	$2,541,302	15%
Service/Equipment	21	7%	$56,000	$17,000	$73,000	0%
Structural	24	8%	$361,600	$156,000	$517,600	3%
Transportation/Vehicle	82	27%	$51,750	$15,651	$67,401	0%
Other	65	21%	$805,150	$31,000	$836,150	5%
Undetermined	20	7%	$4,545,000	$2,053,000	$6,598,000	39%
Total	305	100%	$10,663,901	$6,436,852	$17,100,753	100%

* *Property and content loss are based on estimates and not all agencies report these figures. Mutual aid and exposure reports are not counted in the incident total, but property and content loss are reflected. Percentages are rounded to the nearest whole number.*

The average fire in a business occupancy resulted in damages of $56,068. The leading areas of origin were reported in the functional areas (kitchens, bars, laundry rooms, offices, and other) and storage areas

.

Undetermined was listed in 7% of the reported incidents accounting for more than $6.5 million in loss. The Office of the State Fire Marshal will continue to work with the fire service in identifying and documenting this information as accurately as possible.

Three incidents were reported to have occurred in the shipping/receiving area, loading area, and/or dock or bay area, resulting in $2.5 million in loss

SUMMARY OF WASHINGTON'S FOUR MOST POPULATED CITIES

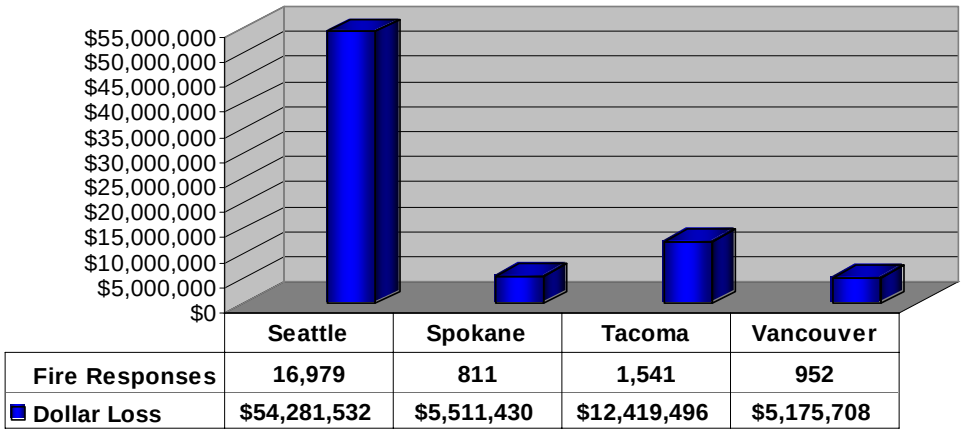
Washington's Four Most Populated Cities

The information below is based on summary data provided by each of the agencies utilizing their current data collection systems.

The four most populated cities in Washington are still in the process of migrating to NFIRS 5.0. Vancouver will begin submitting NFIRS 5.0 data in 2002. Spokane and Tacoma are planning to submit in 2003, and Seattle is targeted for 2004.

	Seattle	Spokane	Tacoma	Vancouver
Population (2000 U.S. Census)	563,374	195,629	193,556	143,560
Type of Response				
Rescue & EMS	57,211	17,974	22,320	16,666
False Alarms & False Calls	6,059	1,077	2,932	1,109
Good Intent Calls	2,677	1,226	2,227	862
Service Calls	344	Combined with above	4,373	265
Fire Responses	16,979	811	1,541	952
Dollar Loss	**$54,281,532**	**$5,511,430**	**$12,419,496**	**$5,175,708**
Hazardous Conditions	954	258	466	210
Total	84,224	21,346	33,859	20,064
Frequency of Fire				
One fire incident reported every:	30 Minutes	648 Minutes	341 Minutes	552 Minutes
Dollars lost per day	$148,716	$15,099	$34,026	$14,180
Cost per person per year	$96	$28	$64	$36

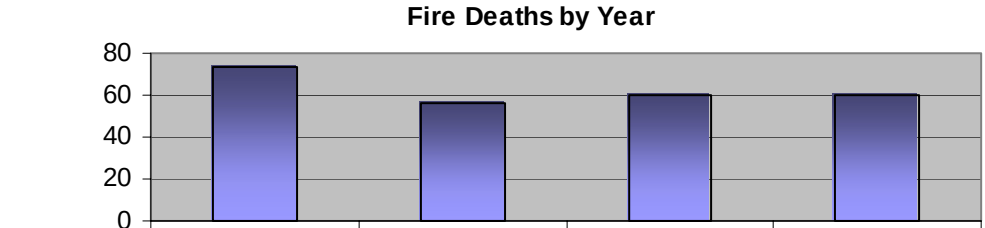
Dollar Losses



FIRE FATALITIES

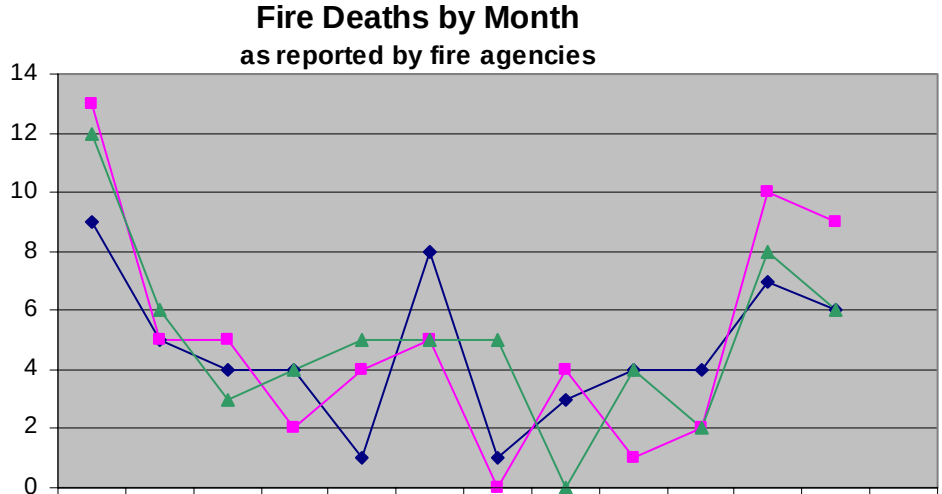
Fire Fatalities

In 2001, 49 separate fire incidents resulted in 60 fire deaths were reported to the Office of the State Fire Marshal. Seven multi-fatality fires claimed the lives of 15 victims. Four fatalities were firefighters that lost their lives in the line of duty while battling a wild land fire in Okanogan County.



	1998	1999	2000	2001
Fire Deaths	73	56	60	60

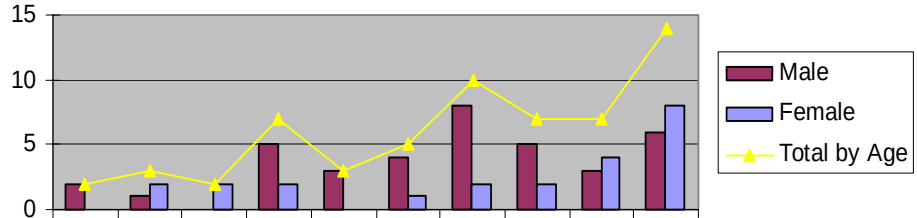
Looking at the monthly fluctuations illustrated below, historically, winter months present the highest number of fire deaths with smoking, home heating, and electrical equipment reported as the primary causes of fire during the cold seasons.



	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
1999	9	5	4	4	1	8	1	3	4	4	7	6	56
2000	13	5	5	2	4	5	0	4	1	2	10	9	60
2001	12	6	3	4	5	5	5	0	4	2	8	6	60

Males represent 62% and females 38% of fire fatalities. Historically, young children and the elderly are the most vulnerable. Egress and mobility difficulties and loss of hearing are contributing factors.

Fire Fatalities by Gender and Age

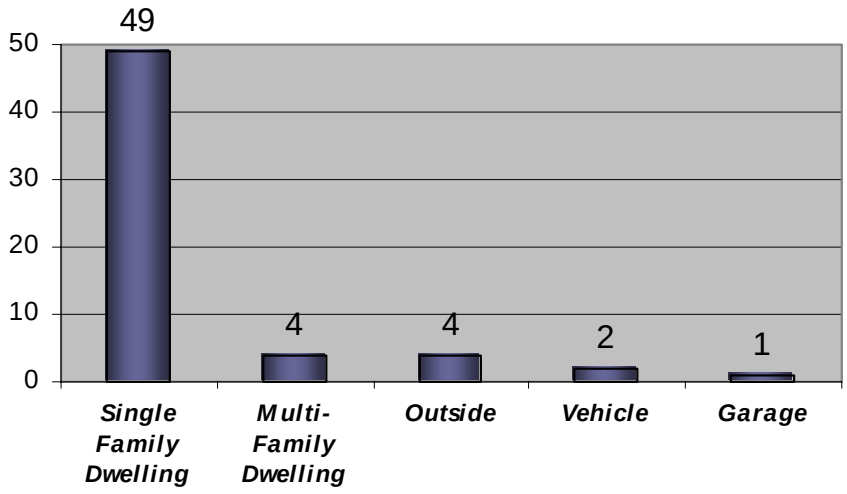


	Under 5	5-11	12-17	18-24	25-34	35-44	45-54	55-64	65-74	75-100
Male	2	1	0	5	3	4	8	5	3	6
Female	0	2	2	2	0	1	2	2	4	8
Total by Age	2	3	2	7	3	5	10	7	7	14

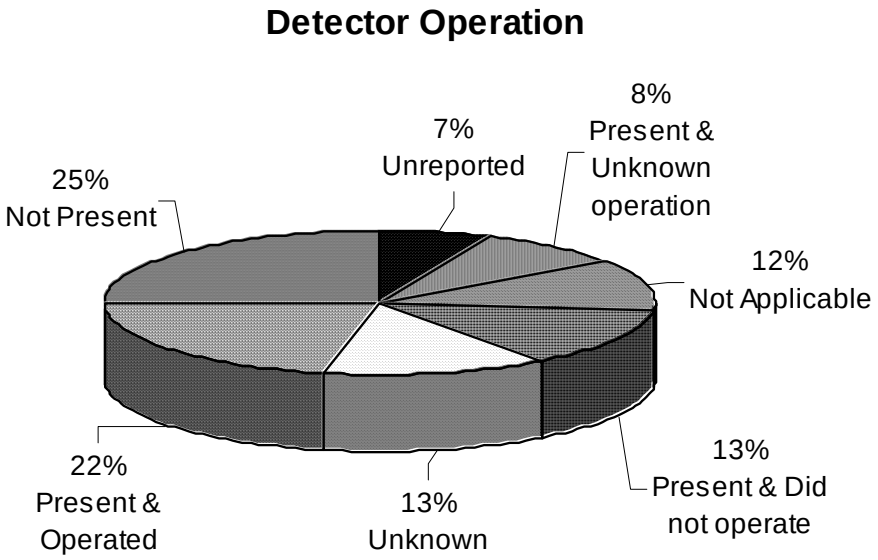
Fires in residential occupancies account for 87% of the reported fatalities. Statistics show that fire strikes most frequently in the home, where people tend to feel safest. Implementing and practicing a home escape plan for the whole family can aid making a safe evacuation during an emergency.

Type of Occupancy or Property

as reported for each of the 60 fire fatalities



Early notification of the presence of fire and smoke increases the likelihood of survival. Unfortunately, the lack of working smoke alarms was found in at least 38% of the incidents that resulted in fire fatalities. Frequent smoke alarm inspections and battery replacement can aid in reducing risk.



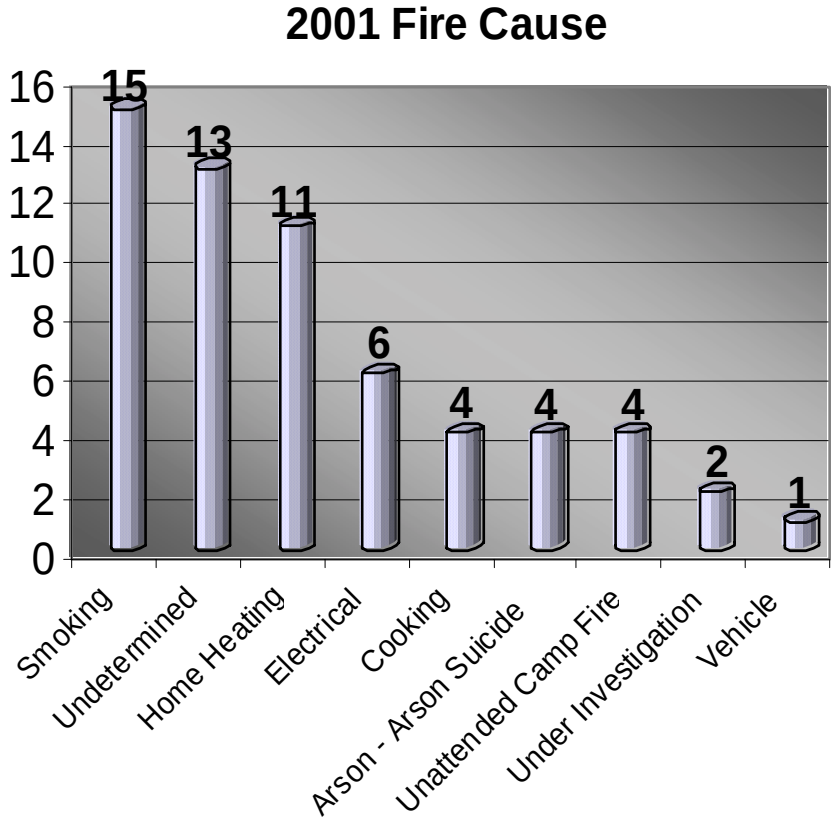
The leading cause of fire in fire related fatalities continues to be carelessness with smoking materials (25%), claiming 15 lives. Several incident reports indicate the victim was impaired by alcohol and/or had fallen asleep while smoking. Two other cases report oxygen in use at the time the victim was smoking. This dangerous combination creates an oxygen rich environment elevating the risk of a fire and injury or death.

Home-heating incidents account for 18% of the fatalities reported. In several cases, the victim's clothing ignited. Other cases report combustibles too close to the heat source and vapors igniting the furnace pilot light.

Electrical appliances or distribution represent 10% of the deaths. Reports indicate power strips and extension cords overloaded electrical circuits. A heating blanket and heating pad were reportedly responsible for two incidents.

Cooking fires caused in 8% of the fatalities. Unattended food on the stove is the leading cause of cooking fires.

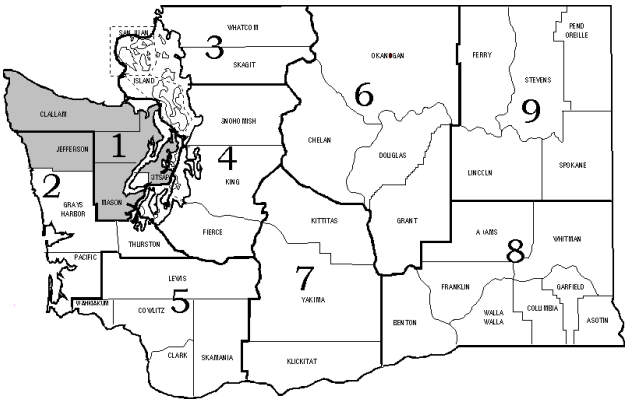
Undetermined was reported as the cause in 22% of incidents. The Office of the State Fire Marshal will continue to work with the fire service to determine the best



REGIONAL PROFILES

Region 1

Region 1 is comprised of fire agencies from Clallam, Jefferson, Kitsap, and Mason Counties. In 2001, 13 agencies out of 38, or 34%, submitted NFIRS 5.0 incident information.



Reporting Agencies

COUNTY	FIRE AGENCY	FDID	2001
CLALLAM	CLALLAM CO #2	05D02	875
CLALLAM	CLALLAM CO #3, SEQUIM	05D03	3707
CLALLAM	PORT ANGELES	05M03	2839
JEFFERSON	JEFFERSON #1 CHIMACUM	16D01	983
JEFFERSON	JEFFERSON #2	16D02	20
JEFFERSON	JEFFERSON #3 PORT LUDLOW	16D03	273
JEFFERSON	JEFFERSON #5 DISC BAY	16D05	2
KITSAP	KITSAP #2 BAINBRIDGE	18D02	564
KITSAP	KITSAP CO#7 SOUTH KITSAP	18D07	8153
KITSAP	KITSAP COUNTY FIRE MARSHAL	18FM	41
MASON	MASON CO#4	23D04	671
MASON	MASON CO#6 UNION	23D06	23
MASON	SHELTON FD	23M02	1337

** Incident totals include mutual aid and exposure reports and invalid records.*

In 2001, 63% of the responses in Region 1 were for Rescue & Emergency Medical Service. The 733 reported fire incidents resulted in over $3.5 million of loss to the communities.

All Incident Types*	Frequency	% of Freq	Property Loss*	Content Loss*	Total	% of Total
Fires	733	6%	$2,609,216	$974,239	$3,583,455	98%
Overpressure, ruptures, explosion, overheat	20	0%	$0	$0	$0	0%
Rescue & Emergency Medical Service	8,147	63%	$18,000	$300	$18,300	0%
Hazardous Conditions (No Fire)	541	4%	$22,300	$50	$22,350	1%
Service Calls	1,403	11%	$20,300	$5,000	$25,300	1%
Good Intent Calls	1,162	9%	$0	$0	$0	0%
False Alarm/False Call (including malicious)	277	2%	$0	$0	$0	0%
Fire Protection System Malfunction	231	2%	$0	$0	$0	0%
Unintentional Fire Protection System Activation	362	3%	$200	$0	$200	0%
Severe Weather & Natural Disaster	51	0%	$0	$0	$0	0%
Other Type of Incidents	43	0%	$0	$0	$0	0%
Undetermined	2	0%	$0	$0	$0	0%
Totals	**12,972**	**100%**	**$2,670,016**	**$979,589**	**$3,649,605**	**100%**

A closer look at fire incidents reveal 145 building fires resulted in a reported $2.74 million in property and content loss. Two fires in the vehicle category were aircraft crashes resulting in property losses of $550,000.

Actual Fire Incidents*	Frequency	% of Freq	Property Loss	Content Loss	Total	% of Total
Structures/Buildings/ Confined Fires	329	45%	$1,842,481	$917,888	$2,760,369	77%
Fixed Mobile Property	20	3%	$67,120	$42,100	$109,220	3%
Vehicle	142	19%	$694,165	$6,850	$701,015	20%
Natural Vegetation	129	18%	$200	$0	$200	0%
Outside Rubbish	82	11%	$500	$1	$501	0%
Outside Equipment/Storage	13	2%	$4,750	$7,400	$12,150	0%
Agricultural	2	0%	$0	$0	$0	0%
Fire, Other	16	2%	$0	$0	$0	0%
Total	733	100%	$2,609,216	$974,239	$3,583,455	100%

* *Property and content loss are based on estimates and not all agencies report these figures. Mutual aid and exposure reports are not counted in the incident total, but property and content loss are reflected. Percentages are rounded to the nearest whole number*

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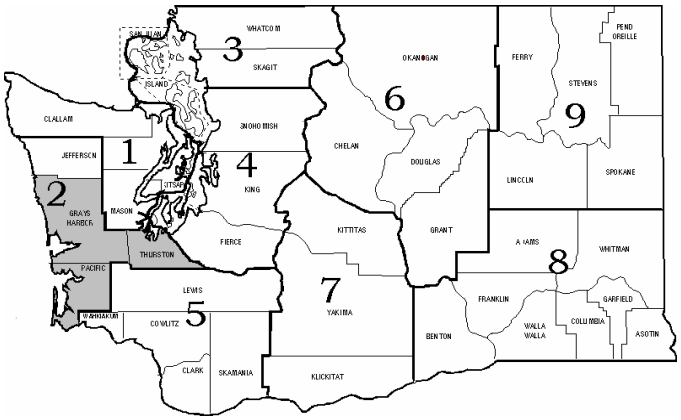
Region 2

Region 2 is comprised of fire agencies from Grays Harbor, Pacific, and Thurston Counties. In 2001, 15 agencies of 52, or 29%, submitted NFIRS 5.0 incident information.



Reporting Agencies

COUNTY	FIRE AGENCY	FDID	2001
GRAYS HARBOR	ABERDEEN FD	14M01	543
GRAYS HARBOR	OCEAN SHORES FD	14M08	367
GRAYS HARBOR	WESTPORT FD/GRAYS HARBOR #3	14M09	2
PACIFIC	PACIFIC #1 OCEAN PARK	25D01	217
PACIFIC	PACIFIC CO#3 WILLAPA VALLEY	25D03	54
PACIFIC	PACIFIC CO #5, TOKELAND	25D05	21
PACIFIC	RAYMOND FD	25M03	81
THURSTON	THURSTON CO#2	34D02	2320
THURSTON	THURSTON CO#3 LACEY	34D03	7189
THURSTON	THURSTON CO#4 RAINIER	34D04	500
THURSTON	THURSTON CO#6	34D06	748
THURSTON	THURSTON CO #8	34D08	559
THURSTON	THURSTON CO#9 McLANE	34D09	970
THURSTON	THURSTON CO#13	34D13	311
THURSTON	OLYMPIA FD	34M02	7058

**Incident totals include mutual aid and exposure reports and invalid records.*

In 2001, Region 2 reported 67% of all responses were for Rescue and Emergency Medical Service. Fire incidents represent only 5% of all calls, but resulted in more than $2.6 million in loss.

All Incident Types*	Frequency	% of Freq	Property Loss*	Content Loss*	Total	% of Total
Fires	1,010	6%	$1,938,865	$680,202	$2,619,067	99%
Overpressure, ruptures, explosion, overheat	20	0%	$0	$0	$0	0%
Rescue & Emergency Medical Service	12,304	67%	$0	$0	$0	0%
Hazardous Conditions (No Fire)	650	4%	$3,100	$0	$3,100	0%
Service Calls	1,185	6%	$22,500	$14,500	$37,000	1%
Good Intent Calls	1,548	8%	$490	$230	$720	0%
False Alarm/False Call (including malicious)	445	2%	$0	$0	$0	0%
Fire Protection System Malfunction	559	3%	$0	$0	$0	0%
Unintentional Fire Protection System Activation	639	4%	$0	$0	$0	0%
Severe Weather & Natural Disaster	23	0%	$3,000	$0	$3,000	0%
Other Type of Incidents	70	0%	$0	$0	$0	0%
Undetermined	0	0%	$0	$0	$0	0%
Totals	**18,453**	**100%**	**$1,967,955**	**$694,932**	**$2,662,887**	**100%**

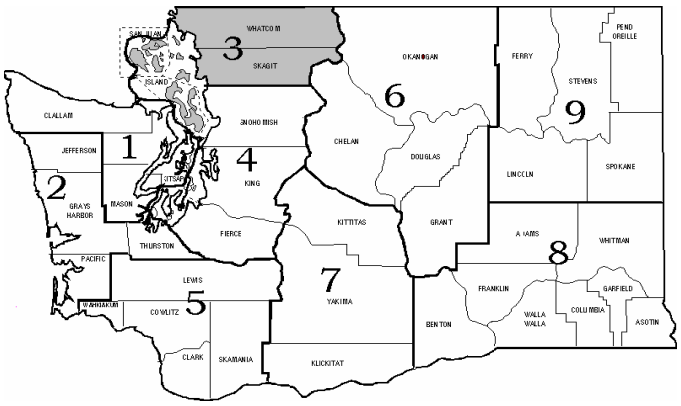
Of the 1,010 fire incidents reported, 39% occurred in structures, buildings, or were confined to a non-combustible container, causing losses of more than $2.3 million.

Actual Fire Incidents*	Frequency	% of Freq	Property Loss	Content Loss	Total	% of Total
Structures/Buildings/ Confined Fires	396	39%	$1,710,215	$659,580	$2,369,795	90%
Fixed Mobile Property	12	1%	$113,500	$2,000	$115,500	4%
Vehicle	152	15%	$83,900	$8,022	$91,922	4%
Natural Vegetation	228	23%	$0	$0	$0	0%
Outside Rubbish	129	13%	$0	$0	$0	0%
Outside Equipment/Storage	27	3%	$1,150	$0	$1,150	0%
Agricultural	1	0%	$0	$0	$0	0%
Fire, Other	65	6%	$30,100	$10,600	$40,700	2%
Total	**1,010**	**100%**	**$1,938,865**	**$680,202**	**$2,619,067**	**100%**

* *Property and content loss are based on estimates and not all agencies report these figures. Mutual aid and exposure reports are not counted in the incident total, but property and content loss are reflected. Percentages are rounded to the nearest whole number.*

Region 3

Region 3 is comprised of Island, San Juan, Skagit, and Whatcom Counties. In 2001, 17 fire agencies of 55, or 31%, submitted NFIRS 5.0 incident information.



Reporting Agencies

COUNTY	FIRE AGENCY	FDID	2001
ISLAND	ISLAND CO#2 OAK HARBOR	15D02	1194
ISLAND	ISLAND CO#5 CENTRAL WHIDBEY	15D05	644
SAN JUAN	FRIDAY HARBOR FD	28M01	104
SKAGIT	SKAGIT CO#2 McLEAN ROAD	29D02	58
SKAGIT	SKAGIT CO#5 BOW/EDISON	29D05	3
SKAGIT	SKAGIT CO#7 LAKE CAVANAUGH	29D07	9
SKAGIT	SKAGIT CO#8 SEDRO WOOLLEY	29D08	1
SKAGIT	SKAGIT CO#9 BIG LAKE	29D09	59
SKAGIT	SKAGIT CO#14 ALGER	29D14	51
SKAGIT	SKAGIT CO#15 LAKE McMURRAY	29D15	5
SKAGIT	MOUNT VERNON FD	29M07	2481
WHATCOM	WHATCOM CO#2 SUDDEN VALLEY	37D02	241
WHATCOM	WHATCOM CO#4 BELLINGHAM	37D04	406
WHATCOM	WHATCOM CO #11 LUMMI ISLAND	37D11	41
WHATCOM	WHATCOM CO#13 BIRCH BAY	37D13	1
WHATCOM	BELLINGHAM FD	37M01	7060
WHATCOM	LYNDEN FD	37M07	102

** Incident totals include mutual aid and exposure reports and invalid records.*

In 2001, 74% of the reported calls were for Rescue & Emergency Medical Service. Fire incidents represent 99% of the total reported dollar loss. (It is important for jurisdictions to accurately document property and content loss, so that the impact of fire damage to communities can be assessed and prevention measures can be implemented).

All Incident Types*	Frequency	% of Freq	Property Loss	Content Loss	Total	% of Total
Fire	585	6%	$313,396	$81,515	$394,911	99%
Overpressure, Rupture, Explosion, Overheat	29	0%	$0	$0	$0	0%
Rescue & Emergency Medical Service	7,764	74%	$0	$0	0	0%
Hazardous Conditions (No Fire)	220	2%	$0	$0	$0	0%
Service Calls	586	6%	$0	$10	$10	0%
Good Intent Calls	442	4%	$5,000	$0	$5,000	1%
False Alarm/False Call (including malicious)	273	2%	$0	$0	$0	0%
Fire Protection System Malfunction	205	2%	$0	$0	$0	0%
Unintentional Fire Protection System Activation	345	4%	$0	$0	$0	0%
Severe Weather & Natural Disasters	11	0%	$0	$0	$0	0%
Other Type of Incidents	74	0%	$0	$0	$0	0%
Undetermined	1	0%	$0	$0	$0	0%
Total	**10,535**	**100%**	**$318,396**	**$81,525**	**$399,921**	**100%**

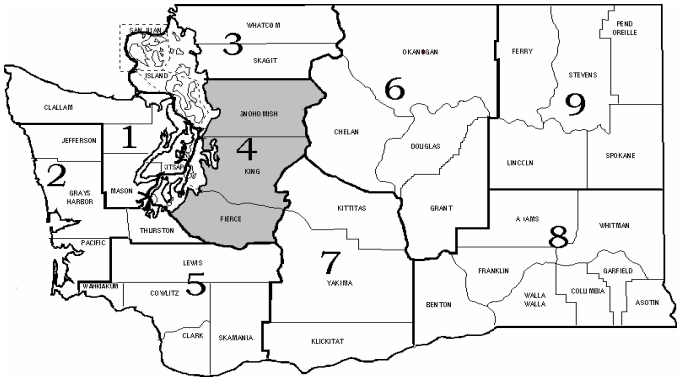
Fire occurred most frequently in structures, buildings or in confined non-combustible containers.

Actual Fires Incidents*	Frequency	% of Freq	Property Loss	Content Loss	Total	% of Total
Structures/Buildings/ Confined Fires	198	34%	$270,066	$80,615	$350,681	89%
Fixed Mobile Property	3	1%	$0	$0	$0	0%
Vehicle	99	17%	$29,150	$600	$29,750	7%
Natural Vegetation	120	20%	$0	$0	$0	0%
Outside Rubbish	55	9%	$125	$0	$0	0%
Outside Equipment/Storage	62	11%	$0	$0	$125	0%
Agricultural	1	0%	$10,000	$0	$10,000	3%
Fire, Other	47	8%	$4,055	$300	$4,355	1%
Total	**585**	**100%**	**$313,396**	**$81,515**	**$394,911**	**100%**

* *Property and content loss are based on estimates and not all agencies report these figures. Mutual aid and exposure reports are not counted in the incident total, but property and content loss are reflected. Percentages are rounded to the nearest whole number.*

Region 4

Region 4 is comprised of fire agencies from King, Pierce, and Snohomish counties. In 2001, 38 fire agencies of 99, or 38%, submitted NFIRS 5.0 information.



Reporting Agencies

COUNTY	FIRE AGENCY	FDID	2001
KING	KING CO#4 SHORELINE	17D04	6603
KING	KING CO #10 ISSAQUAH	17D10	5916
KING	KING CO#39 FEDERAL WAY	17D39	6919
KING	KING CO#40 SPRINGGLEN	17D40	2390
KING	BELLEVUE FD	17M02	16305
KING	ENUMCLAW FD	17M06	262
KING	KIRKLAND FD	17M09	2900
KING	MERCER ISLAND FD	17M10	2132
KING	SNOQUALMIE	17M17	810
KING	TUKWILA FD	17M19	1475
PIERCE	PIERCE CO#5 GIG HARBOR	27D05	2
PIERCE	PIERCE CO#6 CENTRAL PIERCE	27D06	12966
PIERCE	PIERCE CO#8 EDGEWOOD	27D08	543
PIERCE	PIERCE CO#11 NORTH PUYALLUP	27D11	211
PIERCE	PIERCE CO#12 BUCKLEY	27D12	253
PIERCE	RIVERSIDE FIRE & RESCUE	27D14	136
PIERCE	PIERCE CO#20	27D20	60
PIERCE	PIERCE CO#21 GRAHAM	27D21	874
PIERCE	PIERCE CO#22	27D22	2626
PIERCE	PIERCE CO#25 CRYSTAL MNT	27D25	1
PIERCE	BUCKLEY FD	27M02	155
PIERCE	DUPONT FD	27M04	251
PIERCE	PUYALLUP FD	27M09	4033
PIERCE	STEILACOOM FD	27M14	3
PIERCE	SUMNER FD	27M15	40
SNOHOMISH	SNOHOMISH CO#5 SULTAN	31D05	11
SNOHOMISH	SNOHOMISH CO#16	31D16	48
SNOHOMISH	SNOHOMISH CO#17 GRANITE FALLS	31D17	1
SNOHOMISH	SNOHOMISH CO#23	31D23	8
SNOHOMISH	SNOHOMISH CO#25	31D25	9
SNOHOMISH	SNOHOMISH CO#28 INDEX	31D28	134
SNOHOMISH	SNOHOMISH CO FIRE MARSHAL	31FM	282
SNOHOMISH	ARLINGTON FD	31M01	1
SNOHOMISH	DARRINGTON FD	31M02	4
SNOHOMISH	EDMONDS FD	31M03	39
SNOHOMISH	EVERETT FD	31M04	98
SNOHOMISH	MARYSVILLE FD	31M08	7027
SNOHOMISH	MUKITEO FD	31M11	4

** Incident totals include mutual aid and exposure reports and invalid records.*

Statistical information for 2001 does not include the two largest fire agencies in Region 4.

One sprinkler head that activated in a 5-story business occupancy caused an estimated $19,000 in content loss.

All Incident Types*	Frequency	% of Freq	Property Loss	Content Loss	Total	% of Total
Fire	2,952	5%	$9,577,031	$5,851,189	$15,428,220	100%
Overpressure, Rupture, Explosion, Overheat	138	0%	$150	$1,250	$1,400	0%
Rescue & Emergency Medical Service	41,324	67%	$8,500	$0	$8,500	0%
Hazardous Conditions (No Fire)	1,632	3%	$2,400	$8,400	$10,800	0%
Service Calls	4,077	7%	$12,850	$1,500	$14,350	0%
Good Intent Calls	4,481	7%	$700	$135	$835	0%
False Alarm/False Call (including malicious)	1,371	2%	$0	$0	$0	0%
Fire Protection System Malfunction	1,977	3%	$2,050	$0	$2,050	0%
Unintentional Fire Protection System Activation	3,486	6%	$0	$19,000	$19,000	0%
Severe Weather & Natural Disasters	59	0%	$0	$0	$0	0%
Other Type of Incidents	178	0%	$10,000	$0	$10,000	0%
Undetermined	29	0%	$0	$0	$0	0%
Total	**61,704**	**100%**	**$9,613,681**	**$5,881,474**	**$15,495,155**	**100%**

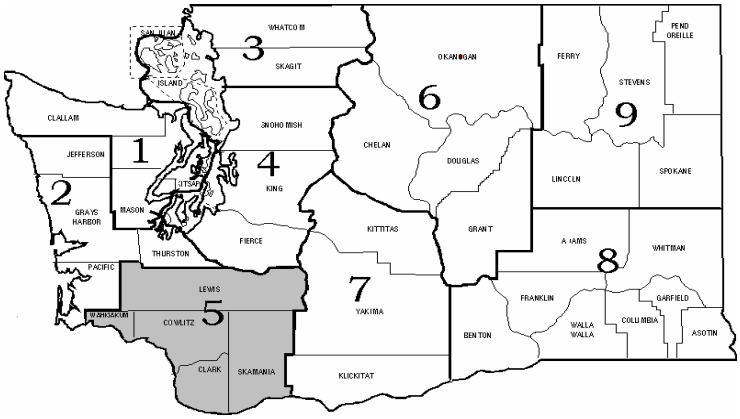
Fire incidents in this region account for 31% of the reported fires in Washington and represent 29% of the total dollars lost.

Actual Fires Incidents*	Frequency	% of Freq	Property Loss	Content Loss	Total	% of Total
Structures/Buildings/ Confined Fires	1,235	42%	$8,769,686	$5,668,166	$14,437,852	94%
Fixed Mobile Property	62	2%	$139,000	$27,200	$166,200	1%
Vehicle	506	17%	$497,190	$26,981	$524,171	3%
Natural Vegetation	567	19%	$16,806	$202	$17,008	0%
Outside Rubbish	283	10%	$3,201	$900	$4,101	0%
Outside Equipment/Storage	123	4%	$2,780	$12,030	$14,810	0%
Agricultural	0	0%	$0	$0	$0	0%
Fire, Other	176	6%	$148,368	$115,710	$264,078	2%
Total	**2,952**	**100%**	**$9,577,031**	**$5,851,189**	**$15,428,220**	**100%**

* *Property and content loss are based on estimates and not all agencies report these figures. Mutual aid and exposure reports are not counted in the incident total, but property and content loss are reflected. Percentages are rounded to the nearest whole number.*

Region 5

Region 5 is comprised of Clark, Cowlitz, Lewis, and Wahkiakum Counties. In 2001, 15 fire agencies of 55, or 27%, reported NFIRS information.



Reporting Agencies

COUNTY	FIRE AGENCY	FDID	2001
CLARK	CLARK CO#1 WASHOUGAL	06D01	59
CLARK	CLARK CO#2 WOODLAND	06D02	10
CLARK	CLARK CO#3 BRUSH PRAIRE	06D03	1
CLARK	CLARK CO#9 FERN PRAIRIE	06D09	76
COWLITZ	COWLITZ CO#2 LONGVIEW/KELSO	08D02	2159
COWLITZ	COWLITZ CO#6 CASTLE ROCK	08D06	507
COWLITZ	CASTLE ROCK FD	08M01	1
COWLITZ	LONGVIEW FD	08M04	2052
COWLITZ	WOODLAND FD	08M05	739
LEWIS	LEWIS CO#2	21D02	836
LEWIS	LEWIS CO#10 PACKWOOD	21D10	1
LEWIS	LEWIS CO#14/CITY OF MORTON	21D14	28
LEWIS	LEWIS CO#18 GLENOMA	21D18	2
LEWIS	CHEHALIS FD	21M02	217
WAHKIAKUM	WAHKIAKUM CO#4 CATHLAMET	35D04	29

** Incident totals include mutual aid and exposure reports and invalid records.*

Statistical information for 2001 does not include incidents from the region's largest fire agency.

Incidents in Region 5 resulted in more than $1.8 million in reported property and content loss. Service calls caused more than $136,000 in loss.

Dollar losses reported in the service calls category were due to water damage. One incident where a domestic water pipe ruptured, subsequently leaking from the floor of origin to floors below, caused a reported $33,000 in property and content loss. Another incident had reported losses of $100,000, caused by an activated sprinkler head (this incident type was miscoded as a water problem).

All Incident Types*	Frequency	% of Freq	Property Loss	Content Loss	Total	% of Total
Fire	351	7%	$1,011,070	$637,625	$1,648,695	90%
Overpressure, Rupture, Explosion, Overheat	12	0%	$100	$0	$100	0%
Rescue & Emergency Medical Service	3,432	70%	$23,500	$0	$23,500	2%
Hazardous Conditions (No Fire)	156	3%	$9,000	$0	$9,000	0%
Service Calls	209	4%	$31,000	$105,050	$136,050	7%
Good Intent Calls	479	10%	$18,100	$100	$18,200	1%
False Alarm/False Call (including malicious)	110	2%	$0	$0	$0	0%
Fire Protection System Malfunction	65	1%	$0	$0	$0	0%
Unintentional Fire Protection System Activation	105	2%	$0	$0	$0	0%
Severe Weather & Natural Disasters	6	0%	$0	$0	$0	0%
Other Type of Incidents	38	1%	$1,500	$0	$1,500	0%
Undetermined	0	0%	$0	$0	$0	0%
Total	**4,963**	**100%**	**$1,094,270**	**$742,775**	**$1,837,045**	**100%**

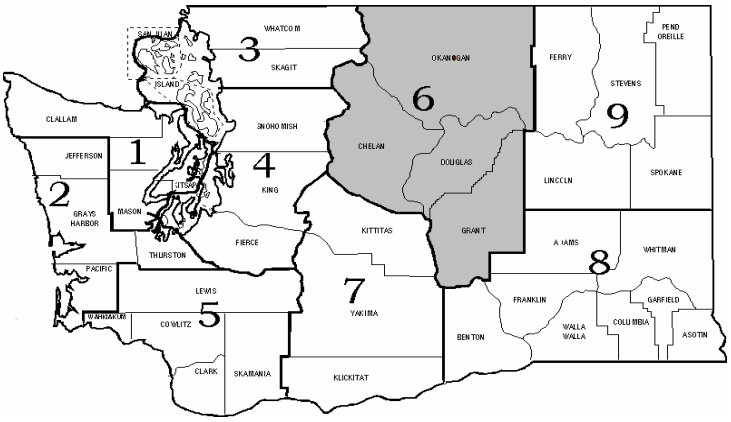
The 148 reported structure, building, or fires confined to a non-combustible container totaled losses of more than $1.5 million. One fire in bark dust caused a reported $10,000 in property loss.

Actual Fire Incidents*	Frequency	% of Freq	Property Loss	Content Loss	Total	% of Total
Structures/Buildings/ Confined Fires	148	42%	$914,400	$626,200	$1,540,600	93%
Fixed Mobile Property	7	2%	$8,000	$2,250	$10,250	1%
Vehicle	84	24%	$45,750	$835	$46,585	3%
Natural Vegetation	35	10%	$200	$0	$200	0%
Outside Rubbish	31	9%	$845	$0	$845	0%
Outside Equipment/Storage	14	4%	$10,125	$0	$10,125	1%
Agricultural	1	0%	$0	$0	$0	0%
Fire, Other	31	9%	$31,750	$8,340	$40,090	2%
Total	**351**	**100%**	**$1,011,070**	**$637,625**	**$1,648,695**	**100%**

* *Property and content loss are based on estimates and not all agencies report these figures. Mutual aid and exposure reports are not counted in the incident total, but property and content loss are reflected. Percentages are rounded to the nearest whole number.*

Region 6

Region 6 is comprised of Chelan, Douglas, Grant, and Okanogan Counties. In 2001, 37 fire agencies of 63, or 59%, reported NFIRS 5.0 incident information.



Reporting Agencies

COUNTY	FIRE AGENCY	FDID	2001
CHELAN	CHELAN CO #1, SUNNYSLOPE	04D01	651
CHELAN	CHELAN CO#3 LEAVENWORTH	04D03	462
CHELAN	CHELAN CO#4	04D04	11
CHELAN	CHELAN CO #5	04D05	83
CHELAN	CHELAN CO#6	04D06	27
CHELAN	CASHMERE FD	04M01	79
DOUGLAS	DOUGLAS CO #2	09D02	456
DOUGLAS	DOUGLAS CO#6 BREWSTER	09D06	50
DOUGLAS	BRIDGEPORT FD	09M01	8
GRANT	GRANT CO#3 QUINCY	13D03	384
GRANT	GRANT CO#4 WARDEN	13D04	63
GRANT	GRANT CO#6 HARTLINE	13D06	7
GRANT	GRANT CO#7	13D07	163
GRANT	GRANT CO#8 MATTAWA	13D08	58
GRANT	GRANT COUNTY #10	13D10	151
GRANT	GRANT CO # 13	13D13	113
GRANT	COULEE CITY FD	13M01	24
GRANT	ELECTRIC CITY FD	13M03	27
GRANT	EPHRATA FD	13M04	189
GRANT	MOSES LAKE FD	13M08	654
GRANT	QUINCY FD	13M09	106
GRANT	SOAP LAKE FD	13M10	35
OKANOGAN	OKANOGAN CO#1 OROVILLE	24D01	56
OKANOGAN	OKANOGAN CO#2 ELMER CITY	24D02	19
OKANOGAN	OKANOGAN CO#3 MALOTT	24D03	133
OKANOGAN	OKANOGAN CO#4 TONASKET	24D04	110
OKANOGAN	OKANOGAN CO#5	24D05	1
OKANOGAN	OKANOGAN CO#6	24D06	2
OKANOGAN	OKANOGAN CO#7 RIVERSIDE	24D07	45
OKANOGAN	OKANOGAN CO#9	24D09	2
OKANOGAN	OKANOGAN CO#11	24D11	8
OKANOGAN	OKANOGAN CO#12 TONASKET	24D12	14
OKANOGAN	COULEE DAM FD	24M01	1
OKANOGAN	NESPELEM FD	24M03	1
OKANOGAN	OKANOGAN FD	24M04	66
OKANOGAN	OMAK FD	24M05	257
OKANOGAN	TWISP FD	24M09	40

**Incident totals include mutual aid and exposure reports and invalid records.*

Region 6 reported 3,150 incidents, with losses of more than $9 million dollars.

The 193 structure fires resulted in losses of over $8 million. Mobile property fires accounted for approximated $940,000. A fire at an electrical-generating plant caused an estimated $2,000,000 in property damage to a transformer.

All Incident Types*	Frequency	% of Freq	Property Loss	Content Loss	Total	% of Total
Fire	880	28%	$5,845,300	$1,494,110	$7,339,410	97%
Overpressure, Rupture, Explosion, Overheat	16	1%	$0	$0	$0	0%
Rescue & Emergency Medical Service	1,060	34%	$2,500	$0	$2,500	0%
Hazardous Conditions (No Fire)	279	9%	$225,050	$2,150	$227,200	3%
Service Calls	167	5%	$0	$0	$0	0%
Good Intent Calls	390	12%	$0	$0	$0	0%
False Alarm/False Call (including malicious)	185	6%	$1,000	$0	$1,000	0%
Fire Protection System Malfunction	75	2%	$0	$0	$0	0%
Unintentional Fire Protection System Activation	91	3%	$0	$0	$0	0%
Severe Weather & Natural Disasters	0	0%	$0	$0	$0	0%
Other Type of Incidents	8	0%	$0	$0	$0	0%
Undetermined	0	0%	$0	$0	$0	0%
Total	**3,151**	**100%**	**$6,073,850**	**$1,496,260**	**$7,570,110**	**100%**

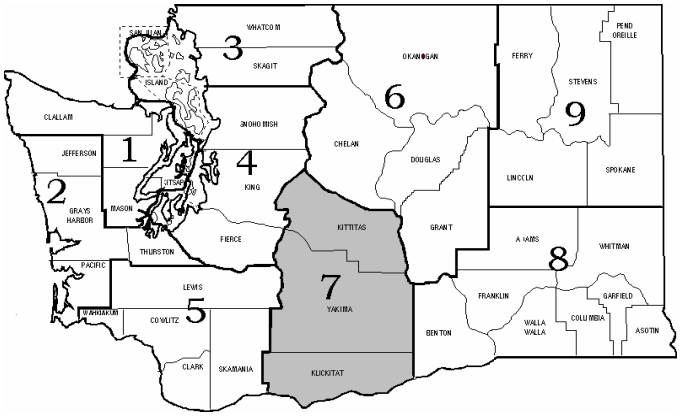
Dollar loss in the agricultural category was attributed to fire in hay stacks, wheat, cultivated grain or crops. Natural vegetation fires account for 45% of all fire incidents in Region 6 and 16% of all fires in Washington.

Actual Fire Incidents*	Frequency	% of Freq	Property Loss	Content Loss	Total	% of Total
Structures/Buildings/ Confined Fires	193	22%	$4,739,450	$1,400,710	$6,140,160	87%
Fixed Mobile Property	13	1%	$91,000	$50,000	$141,000	2%
Vehicle	120	13%	$942,550	$20,900	$963,450	10%
Natural Vegetation	394	45%	$6,500	$0	$6,500	0%
Outside Rubbish	95	11%	$0	$0	$0	0%
Outside Equipment/Storage	23	3%	$0	$22,500	$22,500	0%
Agricultural	18	2%	$64,300	$0	$64,300	1%
Fire, Other	24	3%	$1,500	$0	$1,500	0%
Total	**880**	**100%**	**$5,845,300**	**$1,494,110**	**$7,339,410**	**100%**

* *Property and content loss are based on estimates and not all agencies report these figures. Mutual aid and exposure reports are not counted in the incident total, but property and content loss are reflected. Percentages are rounded to the nearest whole number.*

Region 7

Region 7 is comprised of Kittitas, Klickitat, and Yakima Counties. In 2001, 27 agencies of 51, or 53%, submitted NFIRS 5.0 incident information. Participation was 100% in Kittitas County.



Reporting Agencies

COUNTY	FIRE AGENCY	FDID	2001
KITTITAS	KITTITAS CO#1 THORP	19D01	50
KITTITAS	KITTITAS CO#2 ELLENSBURG	19D02	15
KITTITAS	KITTITAS CO#3 EASTON	19D03	16
KITTITAS	KITTITAS CO#4 VANTAGE	19D04	32
KITTITAS	KITTITAS CO#6 LAKE CLE ELUM	19D06	14
KITTITAS	KITTITAS CO#7 RURAL CLE ELUM	19D07	126
KITTITAS	KITTITAS CO#8 KACHESS	19D08	6
KITTITAS	CLE ELUM FD	19M01	28
KITTITAS	ELLENSBURG FD	19M02	2006
KITTITAS	KITTITAS FD	19M03	34
KITTITAS	ROSLYN FD	19M04	9
KITTITAS	S CLE ELUM FD	19M05	26
KLICKITAT	KLICKITAT CO#5 CENTERVILLE	20D05	38
KLICKITAT	KLICKITAT CO#11 WISHRAM	20D11	1
KLICKITAT	GOLDENDALE FD	20M02	138
YAKIMA	YAKIMA CO#1 COWICHE	39D01	13
YAKIMA	YAKIMA CO#2 SELAH	39D02	982
YAKIMA	YAKIMA CO#3 NACHES	39D03	57
YAKIMA	YAKIMA CO#4 MOXEE	39D04	297
YAKIMA	YAKIMA CO#5 ZILLAH	39D05	2483
YAKIMA	YAKIMA CO #6 GLEED	39D06	18
YAKIMA	YAKIMA CO#7 GLADE/MABTON	39D07	2
YAKIMA	YAKIMA CO#14 NILE/CLIFDELL	39D14	37
YAKIMA	GRANDVIEW FD	39M01	2
YAKIMA	UNION GAP FD	39M09	680
YAKIMA	WAPATO FD	39M10	504
YAKIMA	YAKIMA FD	39M11	6660

** Incident totals include mutual aid and exposure reports and invalid records.*

While Rescue & Emergency Medical Service incidents account for 67% of the calls reported, losses due to fire incidents represent 99% of the total reported.

Structure fires totaled losses of more than $6.7 million.

All Incident Types*	Frequency	% of Freq	Property Loss	Content Loss	Total	% of Total
Fire	1,466	11%	$6,008,735	$2,061,255	$8,069,990	99%
Overpressure, Rupture, Explosion, Overheat	29	0%	$12,000	$300	$12,300	0%
Rescue & Emergency Medical Service	8,895	67%	$1,500	$500	$2,000	0%
Hazardous Conditions (No Fire)	400	3%	$48,650	$0	$48,650	1%
Service Calls	435	3%	$8,000	$0	$8,000	0%
Good Intent Calls	1,281	10%	$250	$0	$250	0%
False Alarm/False Call (including malicious)	231	2%	$0	$0	$0	0%
Fire Protection System Malfunction	213	2%	$0	$0	$0	0%
Unintentional Fire Protection System Activation	260	2%	$0	$0	$0	0%
Severe Weather & Natural Disasters	4	0%	$0	$0	$0	0%
Other Type of Incidents	95	0%	$0	$0	$0	0%
Undetermined	0	0%	$0	$0	$0	0%
Total	**13,309**	**100%**	**$6,079,135**	**$2,062,055**	**$8,141,190**	**100%**

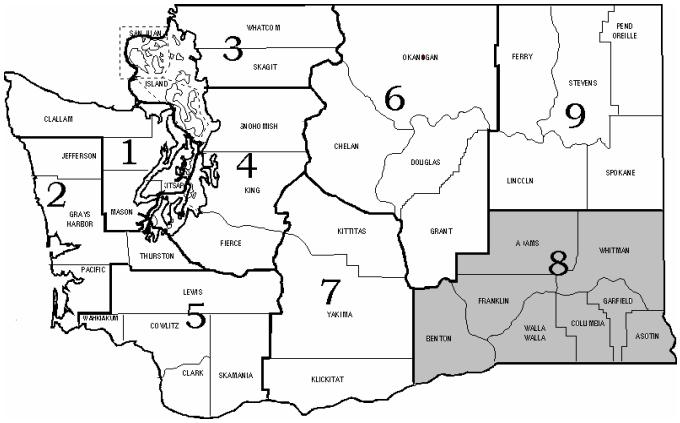
There were 232 passenger vehicle fires reported with property and content losses of more than $418,000. Three separate natural vegetation fires, burning trees, and shrubbery had reported losses of $10,000, $50,000, and $100,000 (estimated replacement cost). One agricultural fire burned hay stacks, resulting in a reported $96,000 in property loss.

Actual Fire Incidents*	Frequency	% of Freq	Property Loss	Content Loss	Total	% of Total
Structures/Buildings/ Confined Fires	466	32%	$4,727,400	$1,997,250	$6,724,650	84%
Fixed Mobile Property	12	1%	$120,500	$35,500	$156,000	2%
Vehicle	284	20%	$704,690	$20,800	$725,490	9%
Natural Vegetation	491	33%	$209,255	$3,500	$212,755	2%
Outside Rubbish	88	6%	$200	$200	$400	0%
Outside Equipment/Storage	55	4%	$82,700	$0	$82,700	1%
Agricultural	17	1%	$153,060	$50	$153,110	1%
Fire, Other	53	3%	$10,930	$3,955	$14,885	1%
Total	**1,466**	**100%**	**$6,008,735**	**$2,061,255**	**$8,069,990**	**100%**

* *Property and content loss are based on estimates and not all agencies report these figures. Mutual aid and exposure reports are not counted in the incident total, but property and content loss are reflected. Percentages are rounded to the nearest whole number.*

Region 8

Region 8 is comprised of Adams, Asotin, Benton, Franklin, Walla Walla, and Whitman Counties. In 2001, NFIRS 5.0 incident information was submitted from 20 fire agencies of 70, or 29%.



Reporting Agencies

COUNTY	FIRE AGENCY	FDID	2001
ADAMS	RITZVILLE FD	01M03	1
ASOTIN	ASOTIN CO#1 CLARKSTON	02D01	170
ASOTIN	CLARKSTON FIRE DEPT	02M02	1
BENTON	BENTON CO#1 KENNEWICK	03D01	1174
BENTON	BENTON CO#2 BENTON CITY	03D02	333
BENTON	BENTON CO#3 PROSSER	03D03	1
BENTON	BENTON CO #4	03D04	568
BENTON	BENTON CO#6 PLYMOTH	03D06	2
BENTON	KENEWICK FD	03M02	3739
BENTON	RICHLAND FD	03M04	2498
BENTON	HANFORD FD	03S01	1062
FRANKLIN	FRANKLIN CO#1 CONNELL	11D01	1
FRANKLIN	FRANKLIN CO#2 KAHLOTUS	11D02	1
FRANKLIN	FRANKLIN CO#3 PASCO	11D03	252
FRANKLIN	PASCO FD	11M02	595
WALLA WALLA	WALLA WALL CO#5 BURBANK	36D05	400
WALLA WALLA	WALLA WALLA FD	36M04	1420
WHITMAN	WHITMAN CO#4 PALOUSE	38D04	15
WHITMAN	PULLMAN FD	38M10	471
WHITMAN	WASHINGTON STATE UNIVERSITY	38S01	327

**Incident totals include mutual aid and exposure reports and invalid records.*
The 1,156 reported fire incidents resulted in more than $10 million in loss. Property loss in the Rescue and Emergency Medical Service category is attributed to vehicle collisions.

All Incident Types*	Frequency	% of Freq	Property Loss	Content Loss	Total	% of Total
Fire	1,173	10%	$8,411,700	$2,279,290	$10,690,990	100%
Overpressure, Rupture, Explosion, Overheat	41	0%	$1,500	$0	$1,500	0%
Rescue & Emergency Medical Service	6,233	52%	$25,000	$250	$25,250	0%
Hazardous Conditions (No Fire)	484	4%	$9,750	$2,200	$11,950	0%
Service Calls	516	4%	$0	$200	$200	0%
Good Intent Calls	1,445	12%	$0	$300	$300	0%
False Alarm/False Call (including malicious)	403	3%	$0	$0	$0	0%
Fire Protection System Malfunction	799	7%	$1,500	$2,750	$4,250	0%
Unintentional Fire Protection System Activation	773	7%	$200	$0	$200	0%
Severe Weather & Natural Disasters	6	0%	$0	$0	$0	0%
Other Type of Incidents	84	1%	$0	$0	$0	0%
Undetermined	6	0%	$0	$0	$0	0%
Total	**11,963**	**100%**	**$8,449,650**	**$2,284,990**	**$10,734,640**	**100%**

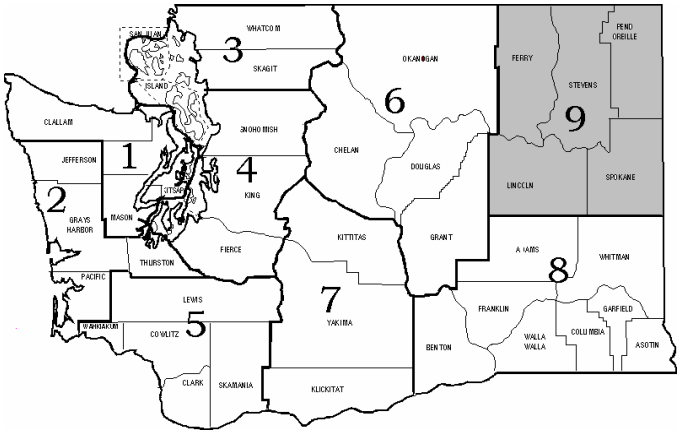
Natural vegetation fires represent 32% of all fires reported. The average dollar loss for building fires in Region 8 is $56,538. In the outside equipment/storage category one train trestle fire was reported with property losses of $1 million dollars.

Actual Fire Incidents*	Frequency	% of Freq	Property Loss	Content Loss	Total	% of Total
Structures/Buildings/ Confined Fires	387	33%	$7,087,625	$2,171,470	$9,259,095	86%
Fixed Mobile Property	23	2%	$78,500	$85,000	$163,500	2%
Vehicle	201	17%	$210,105	$20,600	$230,705	2%
Natural Vegetation	378	33%	$12,350	$2,000	$14,350	0%
Outside Rubbish	124	11%	$2,250	$0	$2,250	0%
Outside Equipment/Storage	33	3%	$1,020,270	$20	$1,020,290	10%
Agricultural	11	0%	$600	$0	$600	0%
Fire, Other	16	1%	$0	$200	$200	0%
Total	**1,173**	**100%**	**$8,411,700**	**$2,279,290**	**$10,690,990**	**100%**

* *Property and content loss are based on estimates and not all agencies report these figures. Mutual aid and exposure reports are not counted in the incident total, but property and content loss are reflected. Percentages are rounded to the nearest whole number.*

Region 9

Region 9 is comprised of Ferry, Lincoln, Pend Oreille, and Spokane Counties. In 2001, NFIRS 5.0 incident information was submitted for 11 fire agencies of 65, or 17%.



Reporting Agencies

COUNTY	FIRE AGENCY	FDID	2001
FERRY	FERRY CO#4 CURLEW	10D14	4
LINCOLN	LINCOLN CO#3 ODESSA	22D03	16
LINCOLN	LINCOLN CO#8 ALMIRA	22D08	1
LINCOLN	ALMIRA FD	22M01	3
PEND OREILLE	PEND OREILLE #5 CUSICK	26D05	7
SPOKANE	SPOKANE CO#1	32D01	603
SPOKANE	SPOKANE CO#9 MEAD	32D09	2264
SPOKANE	SPOKANE CO#10	32D10	813
SPOKANE	CHENEY FIRE	32M02	750
STEVENS	STEVENS CO#4 VALLEY/CHEWLAH	33D04	23

**Incident totals include mutual aid and exposure reports and invalid records*
Statistical information does not include incidents from the regions, largest fire agency.

Rescue and Emergency Medical Service incidents accounted for 62% of the total number of incidents reported in 2001, while fire incidents represent only 7%, but caused more than $674,000 in loss.

All Incident Types*	Frequency	% of Freq	Property Loss	Content Loss	Total	% of Total
Fire	286	7%	$545,402	$129,553	$674,955	96%
Overpressure, Rupture, Explosion, Overheat	17	0%	$0	$200	$200	0%
Rescue & Emergency Medical Service	2,669	63%	$0	$0	0	0%
Hazardous Conditions (No Fire)	195	5%	$0	$200	$200	0%
Service Calls	271	6%	$16,000	$15,000	$31,000	4%
Good Intent Calls	423	10%	$0	$0	$0	0%
False Alarm/False Call (including malicious)	107	2%	$0	$0	$0	0%
Fire Protection System Malfunction	103	2%	$0	$0	$0	0%
Unintentional Fire Protection System Activation	202	5%	$0	$0	$0	0%
Severe Weather & Natural Disasters	3	0%	$0	$0	$0	0%
Other Type of Incidents	8	0%	$0	$0	$0	0%
Undetermined	3	0%	$0	$0	$0	0%
Total	**4,287**	**100%**	**$561,402**	**$144,953**	**$706,355**	**100%**

Building fires resulted in approximately $463,000 in property and content loss.

Actual Fire Incidents*	Frequency	% of Freq	Property Loss	Content Loss	Total	% of Total
Structures/Buildings/ Confined Fires	74	28%	$383,267	$93,198	$476,465	71%
Fixed Mobile Property	6	2%	$45,300	$35,500	$80,800	12%
Vehicle	58	21%	$103,102	$852	$103,954	16%
Natural Vegetation	94	35%	$2,500	$0	$2,500	0%
Outside Rubbish	33	12%	$202	$0	$202	0%
Outside Equipment/Storage	1	0%	$1,030	$2	$1,032	0%
Agricultural	1	0%	$0	$0	$0	0%
Fire, Other	5	2%	$10,001	$1	$10,002	1%
Total	**272**	**100%**	**$545,402**	**$129,553**	**$674,955**	**100%**

* *Property and content loss are based on estimates and not all agencies report these figures. Mutual aid and exposure reports are not counted in the incident total, but property and content loss are reflected. Percentages are rounded to the nearest whole number*

DEPARTMENT OF NATURAL RESOURCES 2001 INCIDENT SUMMARY

CHARACTER AND EXTENT OF THE 2001 FIRE SEASON

The 2001 Fire Season will long be remembered as one of the most extreme seasons Eastern Washington has ever experienced. Two continuous years of summer drought and poor winter recovery produced extremely dry conditions.

By early July, the percentage of water measured in Eastern Washington's heavy forest fuels was already hovering near the critical 12% fuel moisture level. That is when the fire activity began to pick up. Fortunately, most fires on the Westside remained small, due to continued mild weather conditions.

On July 4, the Foster Lane fire in Stevens County began; this would be the first wildfire of many more to come. What started out as a structure fire quickly grew out of control when strong winds pushed the fire outside the fire lines on the afternoon of July 5. The wildfire would consume around 257 acres of land before local forces maintained control.

On July 9, the Libby South fire began at 1415 in Okanogan County. It was a fast moving fire in steep, rough terrain, with limited access, making it a long haul for water. Fifty structures were threatened, but none were lost. Air resources dropped an estimated 690,984 gallons on this fire. At the height of the incident, there were 988 overhead, 7 dozers, 29 tenders, and 7 aircraft assigned. A total of 3,830 acres were burned.

Dry lightning hit in Eastern Washington on July 12 and13, August 12, and again on September 16. Fortunately, most wildfires occurred in the higher elevations away from the more densely populated areas. Only three major project fires started on DNR-protected lands.

The Porcupine fire on July 13 was a complex of fires about 10 miles north of Davenport. Porcupine was in steep, rocky ground, in a mixture of pine and grass fuels. Ten structures were threatened, but losses were contained to one cabin. Final acreage – 451 acres.

The first fire of the Spruce/Dome Complex started on August 12 in bug-killed timber in a remote area south of Rimrock Lake, with three smaller fires burning near White Pass. he Dome fire started on the 13th and spread quickly through dead and dying trees. Due to the extreme fire behavior, initial attack was suspended due to the lack of resources to safely attack the fire. The fires continued to grow each day due to dry fuels caused by the extended drought. Many roads had been put to bed, making access very difficult. Final acreage – 2,442 acres.

The Brewster Complex (August 13) consisted of Gamble Mill (2,500 acres) and the Indian Dan (500 acres) wildfires, both located near Brewster, and 11 smaller fires, ranging from one to five acres in size, located approximately three miles northeast of Riverside. Fuels involved were timber, logging, thinning slash, brush, and grass. Final acreage – 6,154 acres.

The DNR also sent resources to eight other complexes in Eastern Washington, while battling Spruce/Dome and Brewster.

The Union Valley fire in Chelan County on July 28 was a human-caused fire, totaling 4,700 acres. This fire was pushed by the wind and rapidly outgrew the initial attack capabilities. The fire burned in grass, sage, bitter brush, and ponderosa pine, initially. Fuel moistures were running at all time lows for that time of year. One hundred structures were threatened, but only three were lost.

The last DNR project fire for the season was North Coppei (September 16) in Columbia County. This fire started as a result of an escaped "stubble" burn on lands protected by Walla Walla County, which moved onto DNR protection. The fire was contained at 4,810 acres, but it had several significant draws and canyons that required a lot of trailing and mop-up. The dry conditions and wind exposure made control more difficult as the fire burned deep into roots and stumps, and the exposed perimeter was vulnerable to escape from wind. The city of Waitsburg was concerned about their watershed, but the fire was kept approximately four miles from this area. There were no structures lost, damages to timber were moderate and will be salvaged.

More than 227,000 acres of wildlands burned in Washington in 2001; however, fires on DNR protection stayed well below our five-year average. DNR had 810 fires that burned 22,320.8 acres. (The five-year average is 1,448 fires and 20,194.5 acres.)

While DNR was battling the above fires, we were also dispatching resources to 13 major fires on other agencies' jurisdiction in the state. On three occasions, all five of the state's Interagency Management Teams were out at the same time, which is a phenomenal event within itself. This was made possible by the integration of the two federal teams, the five state DNR teams and the short-teams of the state fire districts.

DNR resources were also dispatched to eight other states. With three straight months of dispatching, the 2001 Fire Season will long be remembered.

DAMAGES AND LOSSES	
Merch. Timber	$21,459,500
Timber Products	$2,595
Reproduction	$2,409,006
Forage	$515,005
Watershed	$33,404
Recreation	---
Wildlife	$35,000
Real Property	$495,500
Personal Property	$675,610
Total Damages	$25,625,620

Fire Departments in Development

The following agencies submitted incident information to the Office of the State Fire Marshal in a format other than NFIRS 5.0. Therefore, it may not be reflected in the data presented in this report.

Airway Heights
Bremerton Fire Department
Douglas County Fire District #35
Mukilteo Fire Department
Palouse Fire Department
Pierce County Fire District#3
Renton Fire Department
Seattle Fire Department
Sedro-Woolley Fire Department
Spokane Fire Department
Tacoma Fire Department
Thurston County Fire District #7
Vancouver Fire Department
Whatcom County Fire District #16
Whatcom County Fire District #9

We thank these departments for sharing this valuable data with the Office of the State Fire Marshal and will work closely with them to upgrade their system to be in compliance with NFIRS 5.0.

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